REMARKS

Claims 1-21 are pending. Claims 1-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,239,542 to Breidenstein et al. in view of U.S. Patent No. 6,327,508 to Mergard.

Reconsideration is requested. No new matter is added. The specification and drawings are amended as requested by the Examiner. Claims 1, 8-13, 16-18, and 20 are amended. Claims 22-27 are added. Claim 7 is canceled. The rejections are traversed. Claims 1-6 and 8-27 remain in the case for consideration.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 103(a)

Referring to claim 1, the invention is directed toward a network processing device, comprising: a memory for storing a dynamically configurable set of signaling templates; a trunk controller for receiving and transmitting line signaling; and a device processor within a signaling state machine for conducting the line signaling by executing one of the dynamically configurable signaling templates in the memory, the device processor capable of programming a new signaling template into the dynamically configurable set of signaling templates and to associate the new signaling template with a trunk, the new signaling template overriding an old signaling template in the dynamically configurable set of signaling templates associated with the trunk.

Referring to claim 12, the invention is directed toward a method for configuring a trunk controller in a network processing device, the method comprising: programming a Dynamically Configurable Signaling State Machine with a new template to use in signaling over a trunk, the new template overriding an old template associated with the trunk; assigning a name to the new template; determining signaling used over the trunk connected to the trunk controller; giving the trunk controller the name for the new template in a Dynamically Configurable Signaling State Machine (DCSSM) representing the signaling; and conducting signaling on the trunk controller using the new template. Claim 24 is a Beauregard claim paralleling claim 12. Claim 26 is a means-plus-function claim paralleling claim 12.

Referring to claim 16, the invention is directed toward a method for using a Dynamically Configurable Signaling State Machine (DCSSM) in a network processing device for processing signaling over a trunk, the method comprising: programming the Dynamically Configurable Signaling State Machine with a new template to use in signaling over the trunk, the new template overriding an old template associated with the trunk; assigning a name to the new template; receiving the name of the new template representing a

signaling; and processing signaling over the trunk according to the new template. Claim 20 is a Beauregard claim paralleling claim 16. Claim 22 is a means-plus-function claim paralleling claim 16.

In contrast, Breidenstein, teaches a system for interconnecting telephone circuits operating with different signaling systems and call formats. Breidenstein uses the circuit (e.g., the trunk) to select a state machine to process the signaling and call formats. The state machines are dependent on the circuit, and translate the signaling into a universal language, which can then be translated into another signaling.

Mergard teaches a programmable state machine. Mergard uses mask registers to set up the operation of the state machine, which uses an And-Or Array (AO array) to compute sums of products. The masks control the operation of the AO array, which in turn implement the state machine.

There are three reasons why the combination of Breidenstein and Mergard does not make obvious the invention. First, Breidenstein and Mergard are not analogous prior art. Second, Breidenstein does not teach or suggest that the signaling associated with the circuit can be reprogrammed. And third, Mergard only teaches the ability to program a single state machine. These reasons are addressed in turn.

First, for references to be combined in a § 103 rejection, the art cited must be analogous. The Federal Circuit has stated that there are two situations in which prior art is considered analogous: first, when the art is in the same field of endeavor as the application; and second, if the reference is reasonably pertinent to the problem the application addresses. *See In re Clay*, 23 U.S.P.Q.2d. 1058 (Fed. Cir. 1992), cited in *Wang Laboratories Inc. v. Toshiba Corp.*, 26 U.S.P.Q.2d 1767, 1773 (Fed. Cir. 1993), and *State Contracting & Engineering Corp. v. Condotte America Inc.*, 68 U.S.P.Q.2d 1481, 1489 (Fed. Cir. 2003). In *Wang Laboratories*, the application related to single in-line memory modules (SIMMs) for use in personal computers; the prior art related to a SIMM for an industrial controller. Despite the fact that the application and the prior art both related to memory, this was not enough for the prior art to be considered in the same field of endeavor as the application.

Similarly, the claims in the application and Mergard are not in the same field of endeavor. The claims are directed toward using programmable state machines in telephone circuits, but Mergard teaches programmable state machines in silicon. As Mergard states in the field of the invention (column 1, lines 5-7), Mergard relates to hardware state machines for microcontrollers, not for telephone circuits. In addition, as described in the specification, templates use signaling templates using entries from Table 1. But Mergard uses masks

comprising bits (as described at column 5, line 47 through column 6, line 22). Thus, the masks of Mergard are not even the same thing as the template of the invention. As Breidenstein and Mergard are non-analogous art, the Examiner cannot combine them in arguing that the invention is obvious.

Second, as claimed, the templates can be programmed, to change the signaling associated with a circuit. That is, a new template can be substituted for an old template for a circuit. Breidenstein does not teach this feature. Breidenstein only teaches selecting selects state machines based on the circuit. And Mergard, which is directed strictly toward a programmable state machine and has nothing to do with circuits, cannot teach programming a new template for a circuit. Accordingly, neither Breidenstein nor Mergard teaches all of the features of the claims, and claims 1-6 and 8-27 are allowable over Breidenstein in view of Mergard.

Finally, even if Mergard were analogous prior art (a position the Applicant disputes), Mergard teaches a programmable state machine. The Examiner acknowledges on page 3 of the Office Action dated January 16, 2004, that Breidenstein does not teach the use of dynamically configurable signaling templates. The Examiner is invited to note that at least some of the claims describe a plurality of templates. But Mergard teaches only a single state machine that can be programmed: that is, the state machine of Mergard can only be programmed with one state machine at a time. To support multiple templates simultaneously would require reprogramming the state machines at each step, a concept not taught or suggested by Mergard. (The Applicant also notes that Mergard does *not* teach a meta-state machine: that is, a machine that would receive two inputs: the signals and the template. And even if Mergard taught such a concept, the programmable state machine of Mergard could only simulate one state machine at a time.)

For the foregoing reasons, reconsideration and allowance of claims 1-27 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.

Ariel S. Rogson, Reg. No. 43,054

MARGER JOHNSON & McCOLLOM, P.C.
1030 SW Morrison Street
Portland, OR 97205
503-222-3613
Customer No. 20575

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO:

☐ COMMISSIONER OF PATENTS AND TRADEMARKS WASHINGTON D.C. 20231

☒ MAIL STOP COMMISSIONER FOR PATENTS BOX 1450 ALEXANDRIA, VA 22313-1450

☐ BOX COMMISSIONER FOR TRADEMARKS 2900 CRYSTAL DRIVE ARLINGTON, VA 22202-3513

ON: 2 Mar 2004

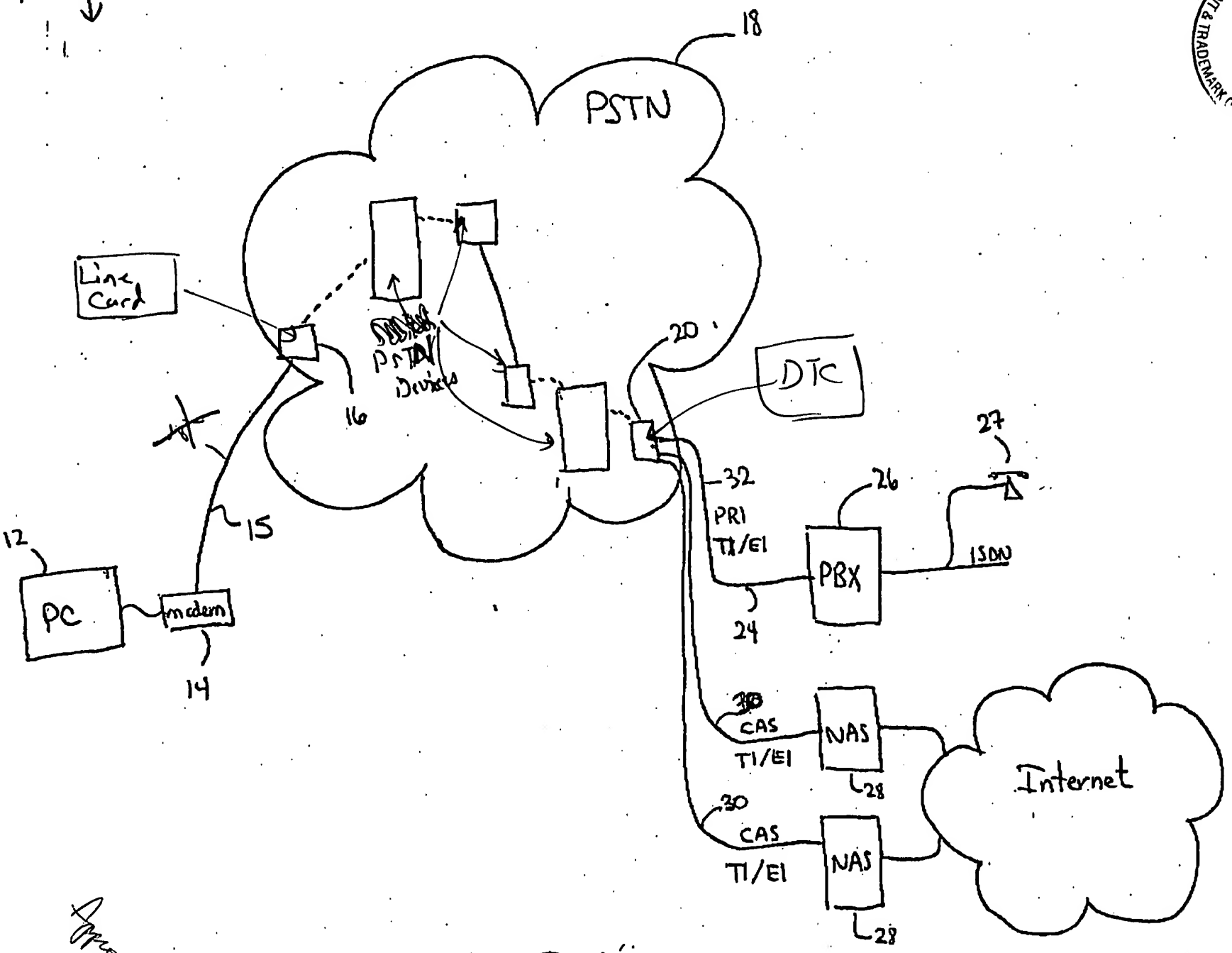

Fig. 1

Approved

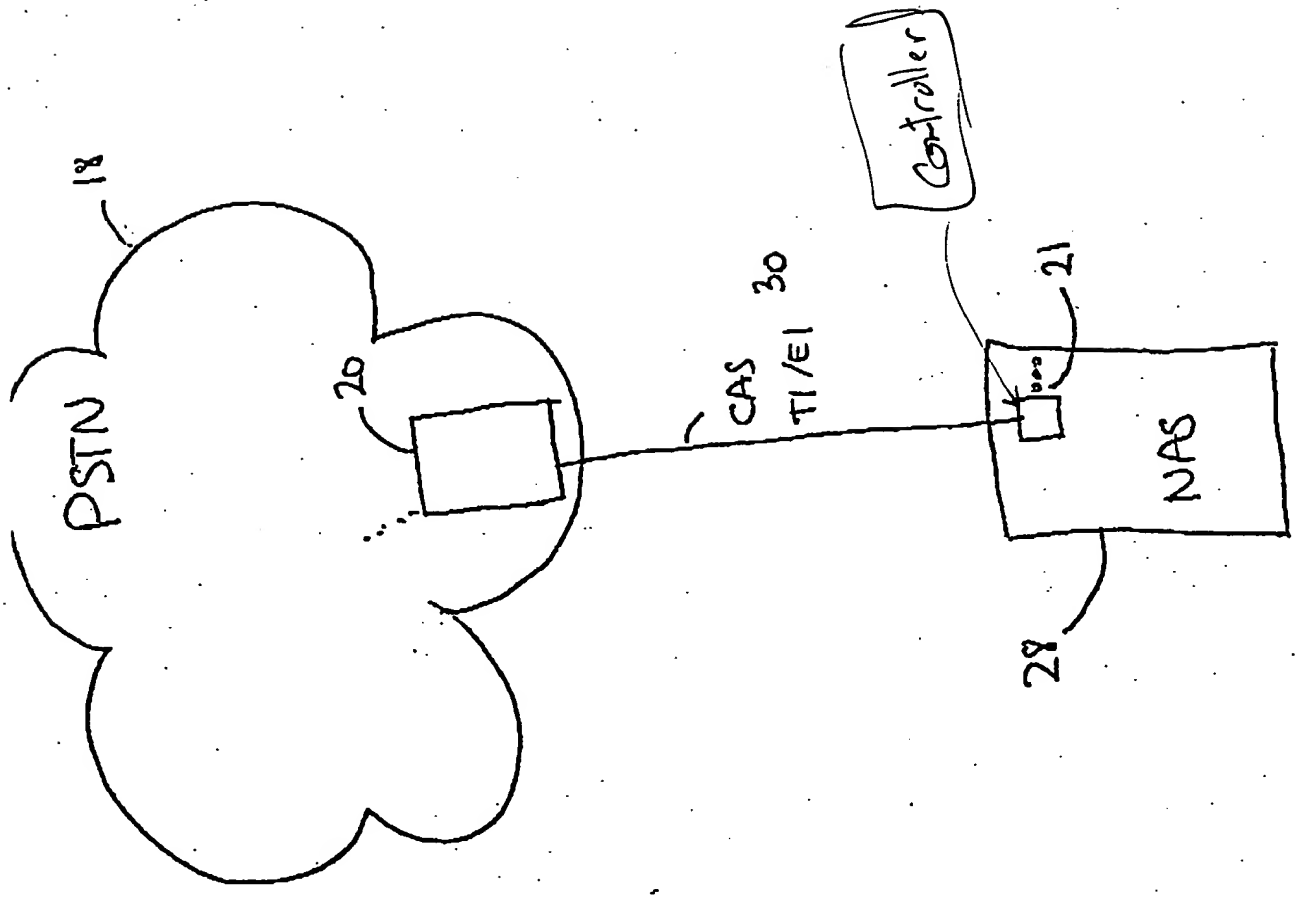

Fig. 2

Approved
HA 5/21/04

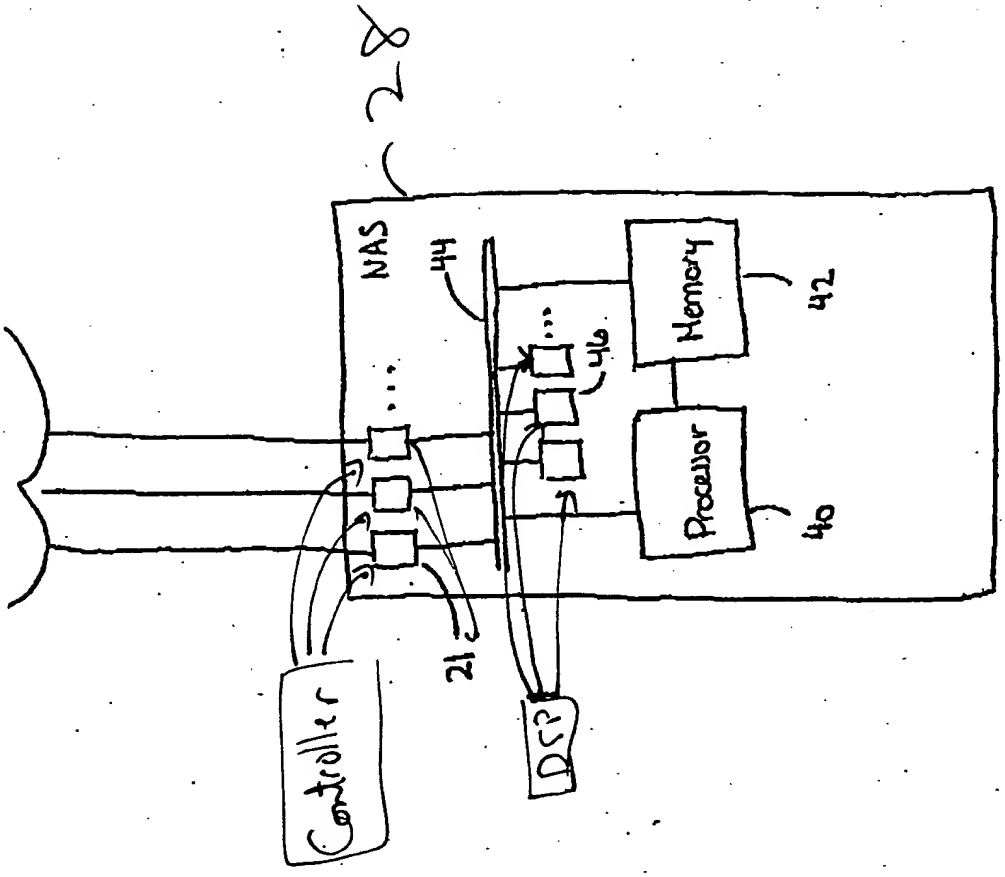

Fig 3

Approved
HA 3/27/04

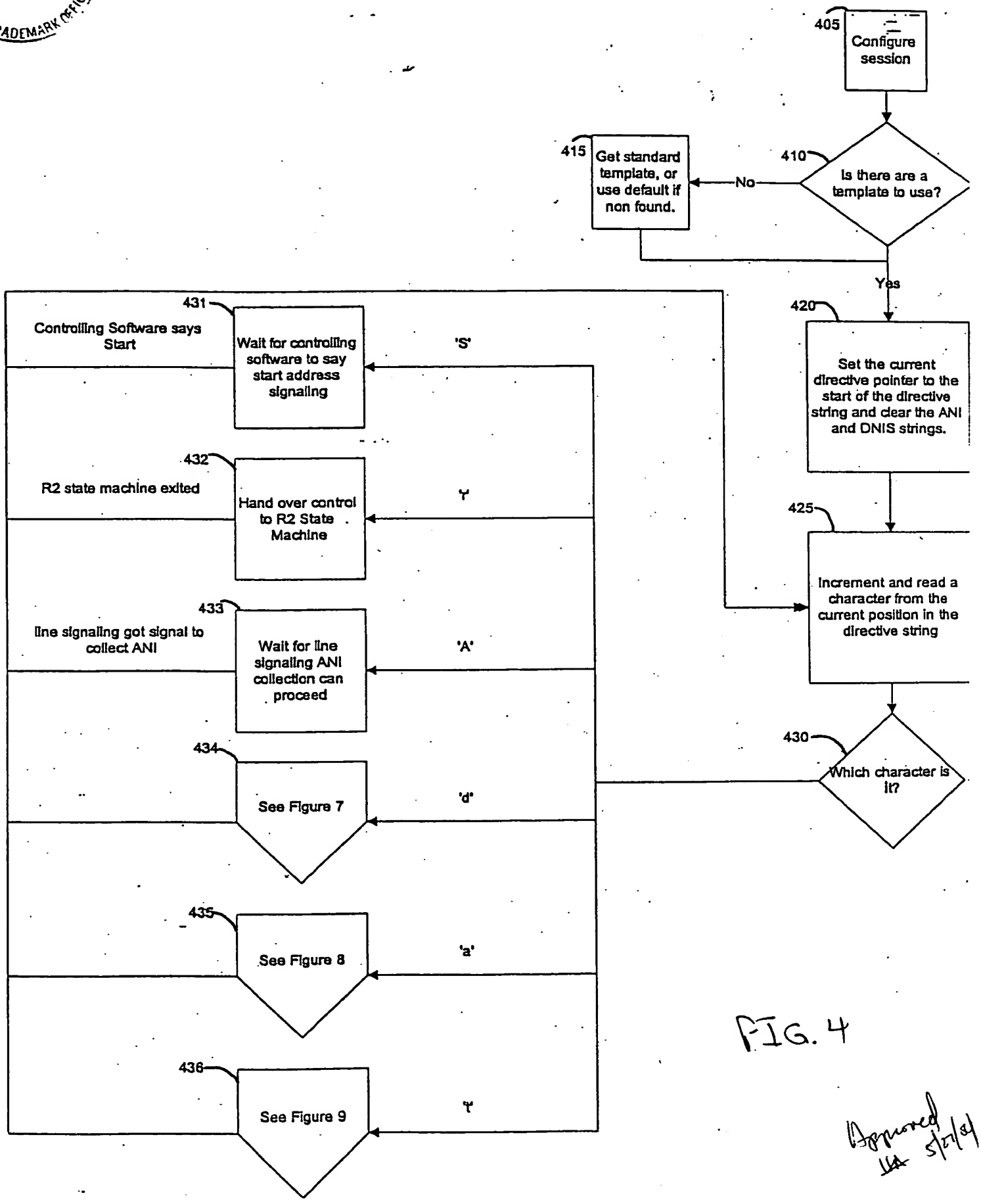

FIG. 4

Approved
LA 5/7/04

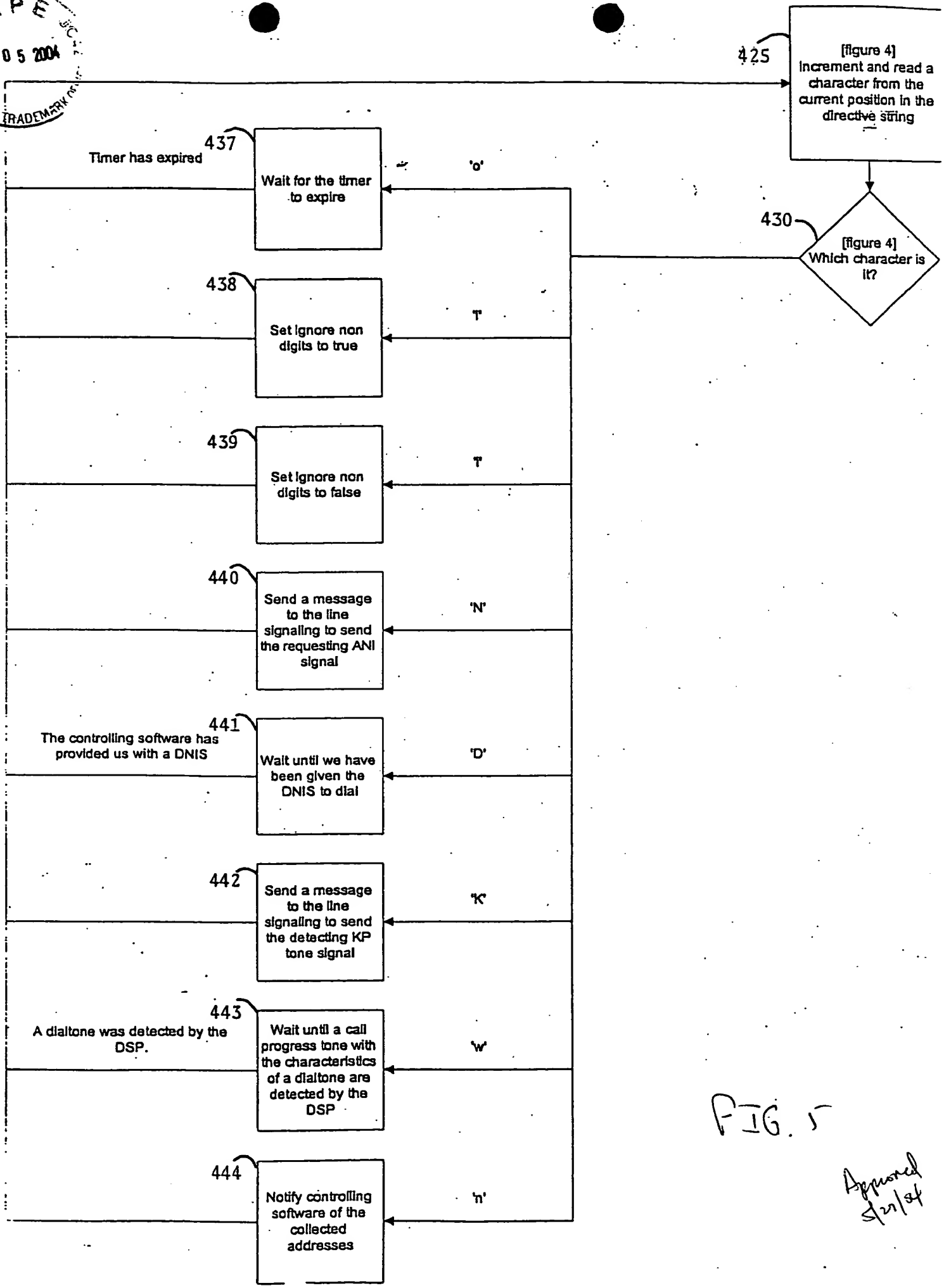

FIG. 5

Approved 5/21/04

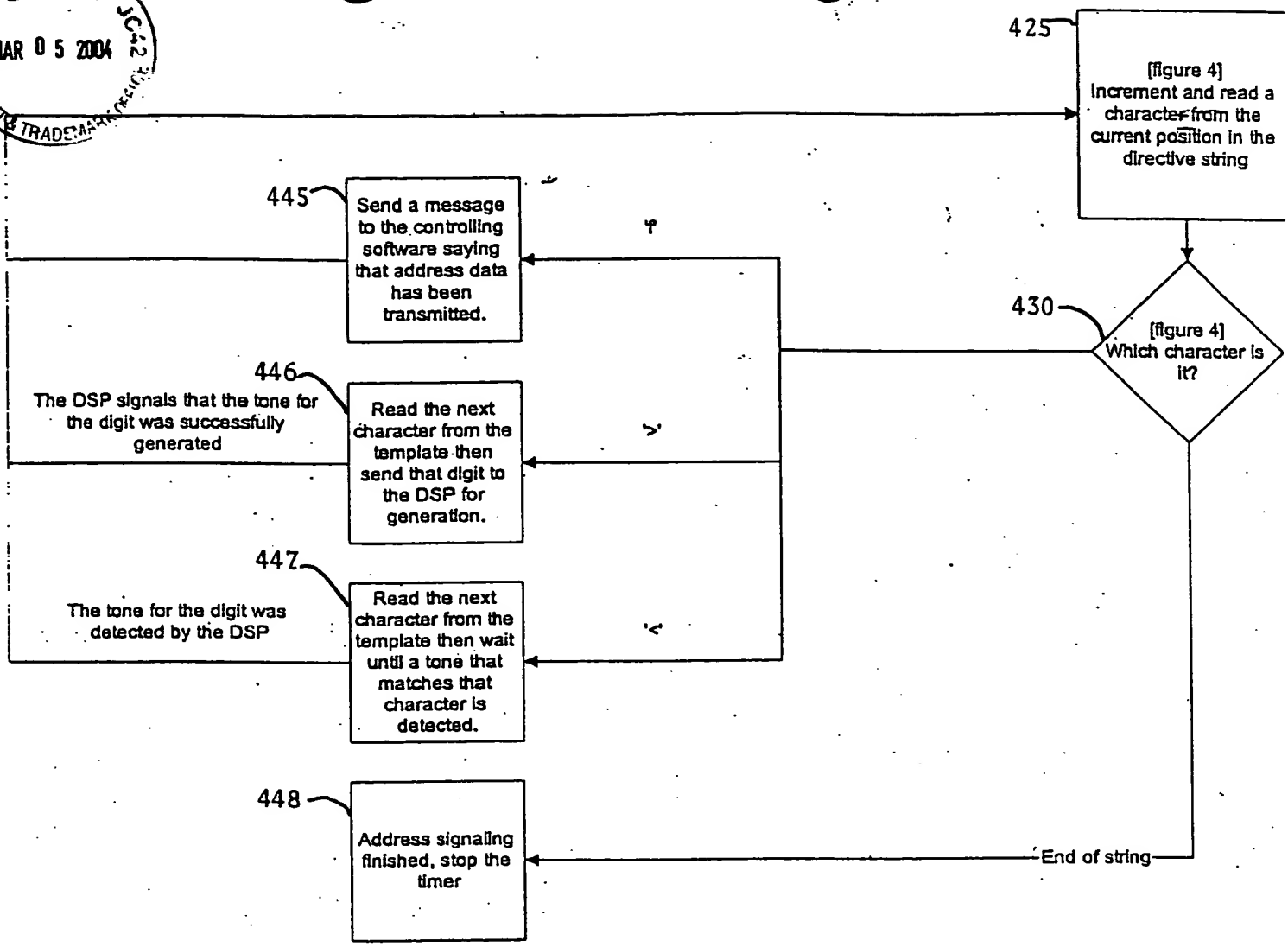

FIG. 6

Approved 5/27/04

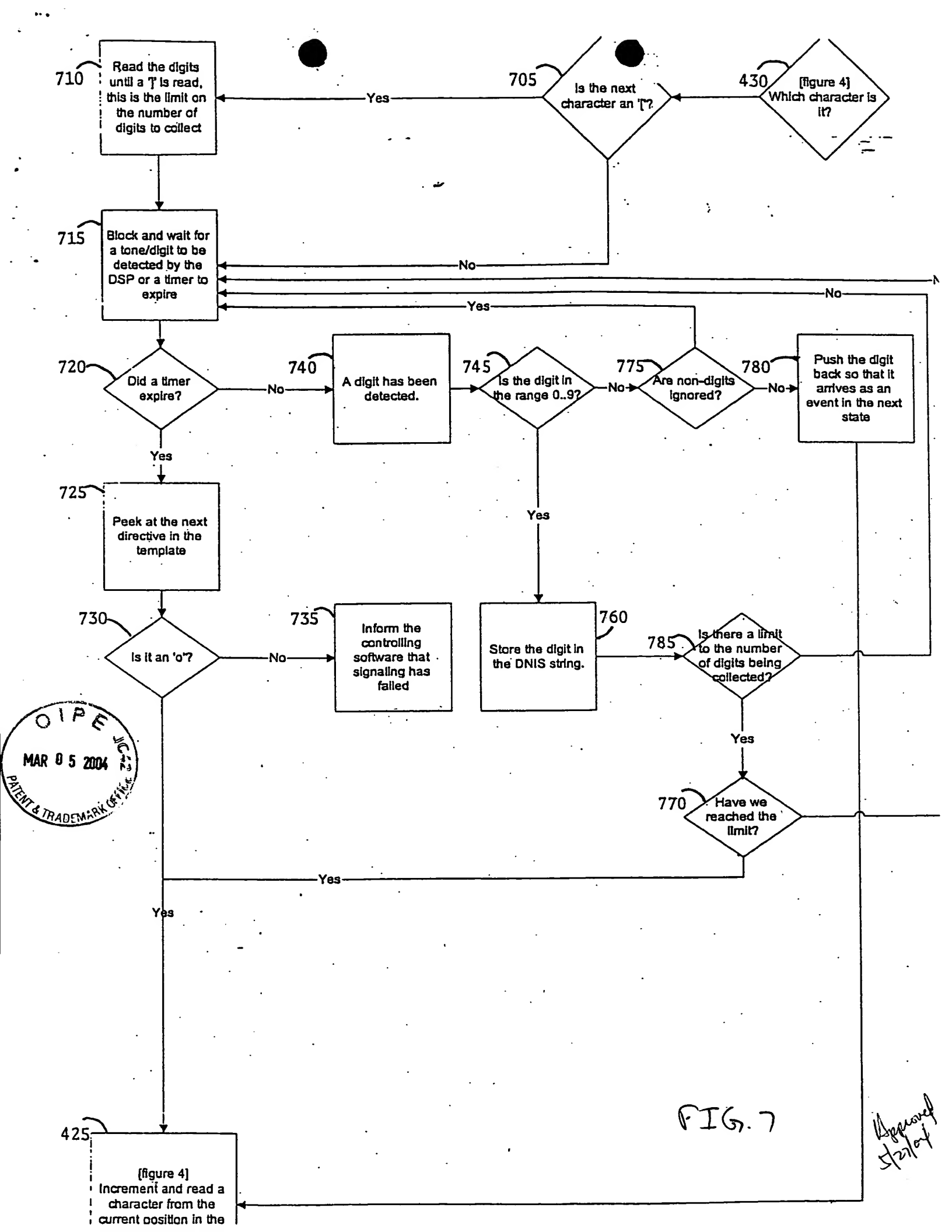

FIG. 7

Approved 5/27/04

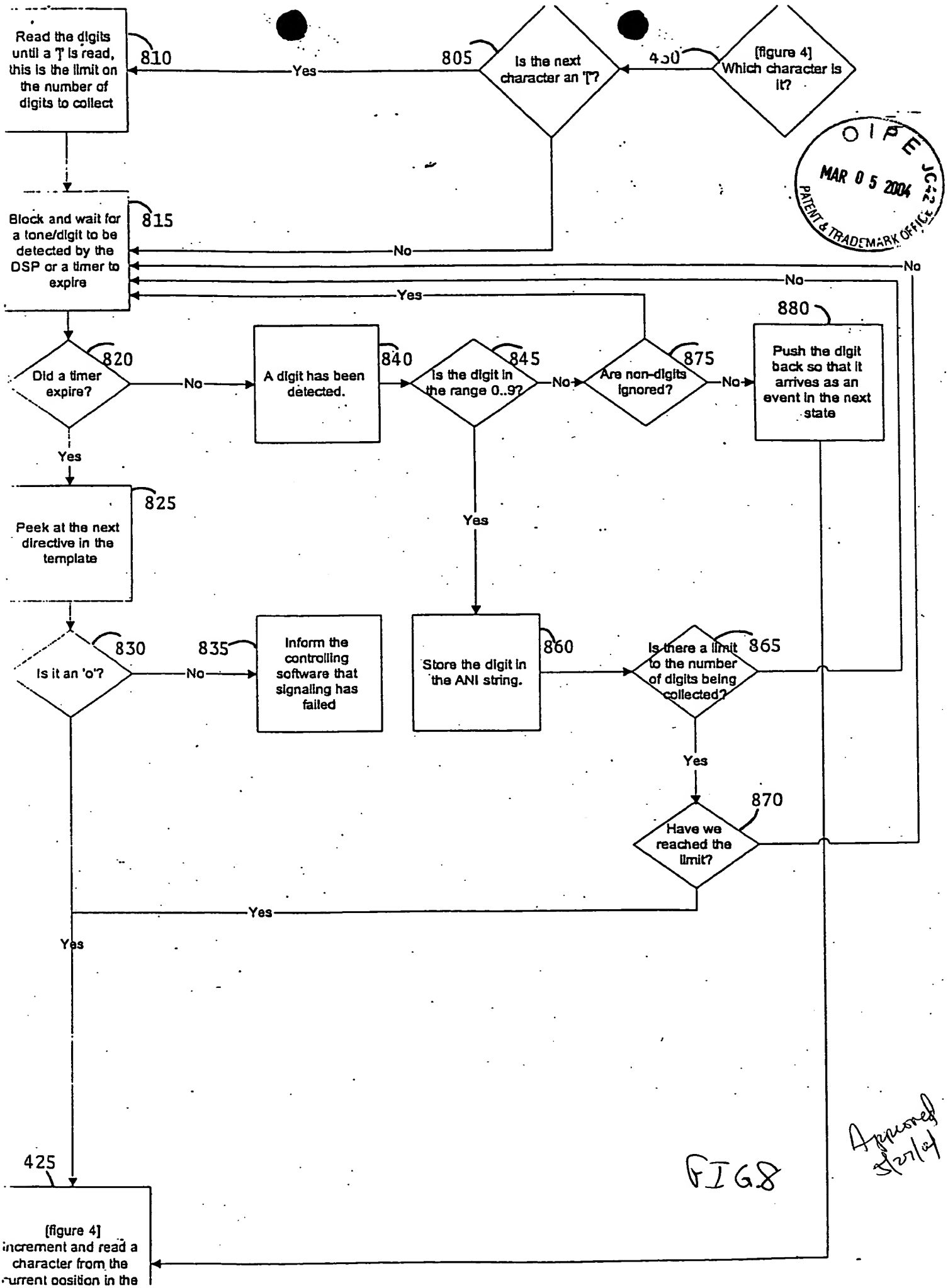

FIG 8

Approved 3/27/04

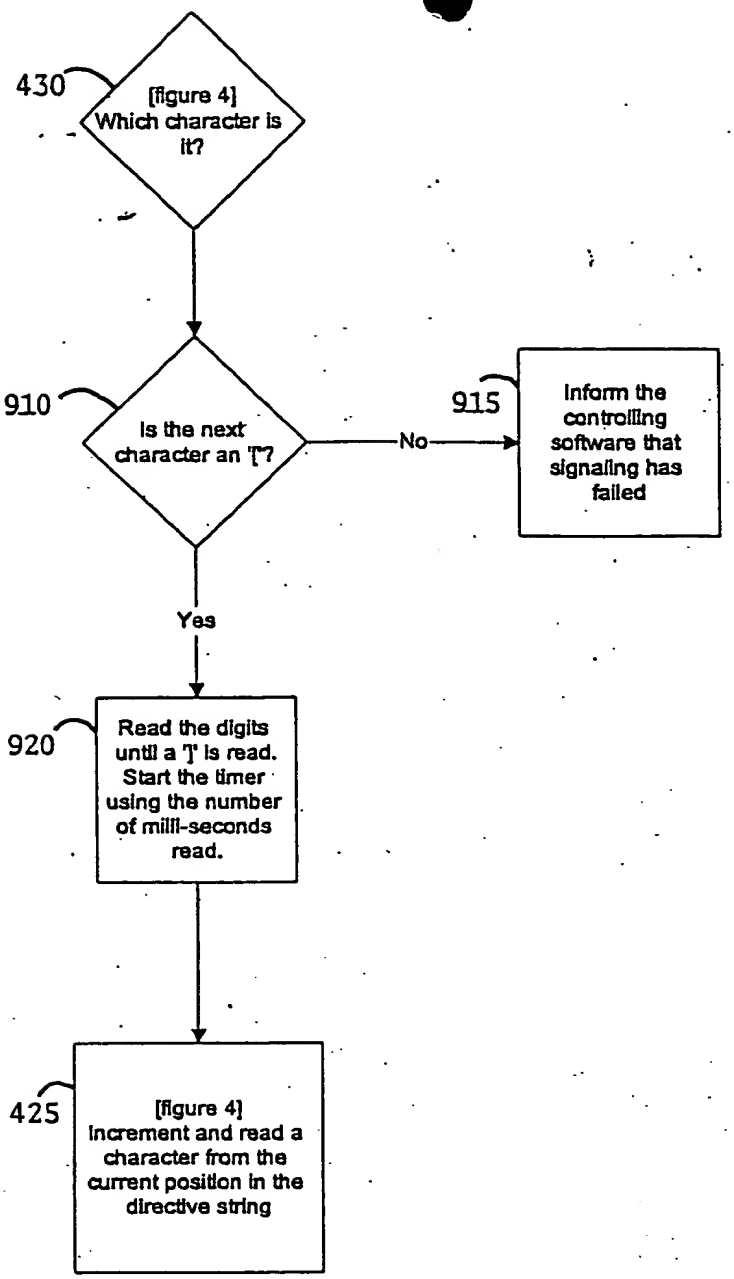

FIG 9

Approved
LA 5/27/04